

scopic disintegration of ureteral calculi. It offers some advantages over ultrasonic disintegration (can be used through a flexible ureteroscope) and electrohydraulic lithotripsy (no risk of ureteral wall burn).

J.A. SMITH, Jr, MD
Salt Lake City

REFERENCES

- Smith JA, Jr (Ed): *Lasers in Urologic Surgery*. Chicago, Year Book Medical Publishers, 1985
Stein BS, Kendall AR: *Lasers in urology*. *Urology* 1984; 23(suppl):411-416

Ultrasonography in Pediatric Urology Patients

PEDIATRIC UROLOGY has incorporated many advances and innovations from other disciplines in recent years, and many sophisticated surgical procedures have revolutionized the treatment of such classic urologic problems as hypospadias, bladder exstrophy and spinal dysraphism.

One of these advances from another field has been the development of high-resolution real-time ultrasound techniques, which have afforded multiple benefits to pediatric urologists and their patients. For children, the studies are noninvasive, cause no trauma or discomfort (no needles or catheters) and can be repeated serially as necessary without accumulating radiation exposure. For physicians, the substitution of high-resolution ultrasonography eliminates the possibility of radiopaque media-induced allergy and hyperosmolar tissue damage from extravasation.

High-resolution ultrasonography can accurately evaluate abnormal adrenal glands, the renal parenchyma and collecting system, the ureters and the bladder. It is especially useful in children because of its superior ability to image hydronephrosis, accurately diagnose duplication anomalies and ureteral ectopia and evaluate renal parenchymal thickness and scarring. Ultrasonography is superior to conventional intravenous urography in evaluating hydronephrosis, which can be difficult to evaluate because of poor visualization due to decreased renal function from high-grade obstruction. These disorders are easily seen on ultrasonograms. Intrarenal masses and the abnormal parenchyma of renal dysplasia or cystic disease are also superiorly seen on ultrasonograms, as are renal duplications with nonfunctioning segments.

Ultrasonographic accuracy is limited by the resolution of the instrument and the diligence of the operator. Because of its superiority in imaging most pediatric urologic disorders and the fact that its use eliminates radiopaque media complications, radiation exposure and the traumatic milieu associated with invasive procedures, high-resolution ultrasonography

has become the diagnostic procedure of choice for many of the problems seen in pediatric urology.

J. DAVID MOORHEAD, MD
Loma Linda, California

REFERENCES

- Markle BM, Potter BM: *Surgical diseases of the urinary tract*, In Haller JO, Shkolnik A (Eds): *Ultrasound in Pediatrics*. New York, Churchill Livingstone, 1981, pp 135-164
Slovits TL, Perlmutter AD: Recent advances in pediatric urological ultrasound. *J Urol* 1980; 123:613-620

Treating Female Urinary Incontinence

THE SUCCESSFUL ELIMINATION of female urinary incontinence requires that the cause be accurately identified because corrective treatment is specific to the origin. Patients who have urgency incontinence as the primary symptom, who do not have associated urethral or bladder neck hypermobility and who have bladder instability noted on a filling cystometrogram are most appropriately treated pharmacologically.

Patients with stress urinary incontinence in whom bladder pressures are stable during the filling cystometrogram and who have significant urethrovesical junction mobility will usually benefit from bladder neck suspension. This procedure can be done either through an abdominal or a vaginal approach. Success of the operation depends on adequate elevation and fixation of the urethra and bladder neck to their normal retropubic position.

If the procedure is done vaginally, the bladder neck is best elevated by placing large, monofilament, nonabsorbable sutures securely on the vaginal wall at each side of the urethrovesical junction, and, after pulling them up through the retropubic space from above, they are secured to the lower abdominal wall fascia or periosteum of the pubis and frequently then to each other.

Many urologists prefer to assure the appropriate placement of these sutures and the successful closing of the continence-providing portion of the urethra by inspecting the urethra cystoscopically as the sutures are tightened.

Those few (about 5%) who continue to have incontinence may achieve cure with another suspension (if the first failed to achieve anatomic correction) or they may be considered for a fascial sling procedure, artificial urinary sphincter or periurethral Teflon paste injection.

ROGER HADLEY, MD
Loma Linda, California

REFERENCES

- Hadley HR, Zimmern PE, Staskin DR, et al: Transvaginal needle bladder neck suspension. *Urol Clin North Am* 1985 May; 12:291-303
Raz S: Modified bladder neck suspension for female stress incontinence. *Urology* 1981; 17:82-85

ADVISORY PANEL TO THE SECTION ON UROLOGY

JOSEPH B. HART, MD
Advisory Panel Chair
CMA Scientific Board Representative
Newport Beach

ARTHUR L. DICK, MD
CMA Section Chair
Section Editor
Los Angeles

EUGENE V. CATTOLICA, MD
CMA Section Secretary
Oakland

JOHN A. BLUM, MD
CMA Section Assistant Secretary
San Diego

HENRY L. HADLEY, MD
Loma Linda University

ROBERT KESSLER, MD
Stanford University

RALPH W. DEVERE WHITE, MD
University of California, Davis

DONALD C. MARTIN, MD
University of California, Irvine

JEAN DEKERNION, MD
University of California, Los Angeles

JOSEPH D. SCHMIDT, MD
University of California, San Diego

EMIL A. TANAGHO, MD
University of California, San Francisco

STUART D. BOYD, MD
University of Southern California

JACK MCANINCH, MD
San Francisco

GERALD B. FARROW, MD
Chula Vista

SHERMAN H. BRUCKNER, MD
Beverly Hills

CHARLES STREIT, MD
Fullerton